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ABSTRACT

PUBLIC CUTDCOR RECREATIONAL FACILITIES AND THE NEEDS OF THE PHYSICALLY HANDICAPPED ARE OVERVIEWED WITH GUIDELINES TO DEVELCP SUCH FACILITIES. CIRCULATION AND ACCESS PROVISIONS FOR WHEEL CHAIRS AND THE SEMI-AMBULATORY ARE EMPHASIZED, INCLUDING REQUIREMENTS FOR PARKING LCTS, PATHWAYS, RESTING AREAS AND PUBLIC BATHROOMS. STANDARD DIMENSIONS AND LAYCUT OF ATHLETIC EQUIPMENT, RAMPS, AND CAMPSITE PLANNING ARE INCLUDED ALCNG WITH A REFERENCE LIST. (TG)

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OUTDOOR RECREATION FOR THE PHYSICALLY HANDICAPPED

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
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Public services provided by State Government are designed to benefit all its citizens. Consistent with this philosophy the State is now undertaking a program to establish design standards and encourage careful planning in order to make its unrivaled public outdoor recreation facilities more readily usable by its physically handicapped citizens.

Relatively minor modifications of park design will improve access greatly for the many physically handicapped persons who have sufficiently overcome their physical limitations to take part in recreation with family and friends in public parks. The pleasure and confidence to be gained from outdoor recreation are an important part of a full and productive life, and New York State intends to continue leading the nation in providing such opportunities for all of its citizens.

NELSON A. ROCKEFELLER
Governor

ED0361131

OUTDOOR RECREATION FOR THE PHYSICALLY HANDICAPPED

A HANDBOOK OF DESIGN STANDARDS

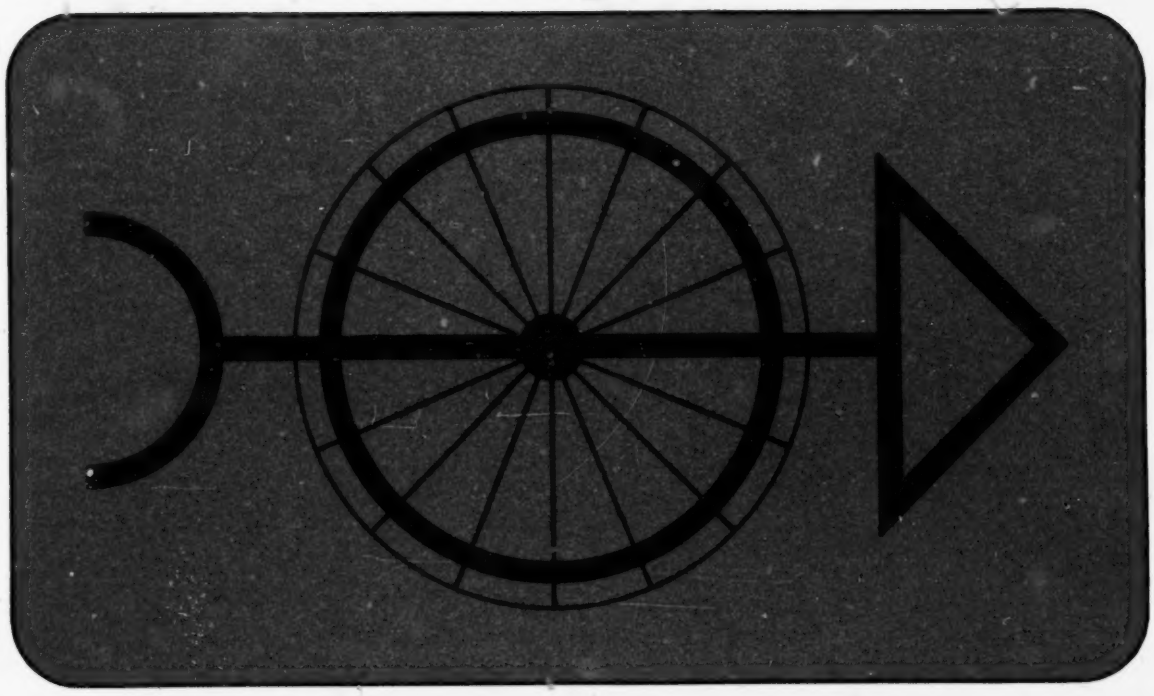
POLICY STATEMENT

The State Council of Parks and Outdoor Recreation has approved and adopted the standards contained in this report. It calls for the adaptation of all existing parks in line with these recommendations and regards them as a mandate for all future construction of public outdoor recreation areas. Adherence to these standards will be required for all municipalities that wish to qualify for State or Federal assistance in their recreation developments.

State of New York, Department of Conservation

State Council of Parks and Outdoor Recreation

August, 1967



This symbol means that a facility has been made easily accesssible to the handicapped person. It does not preclude its use by others.

INTRODUCTION

The current philosophy of public recreation recognizes the responsibility to plan so that *all* citizens, including those with physical limitations, have the opportunity to use some kinds of publicly provided recreation. Today, we recognize that to deny the right to public recreation to any segment of the community is to prevent participation in a central part of American life. Yet the design of our public recreation areas has not always taken into account persons with limitations due to physical disabilities and to some extent has limited public park use by the disabled.

Today, thanks to modern medical treatments and prosthetic appliances, ingenious self-help devices and expanded means of rehabilitation therapy, a growing number of people with physical limitations are able to live productive and meaningful lives. When a disabled person has worked hard to gain sufficient mobility and confidence to attempt recreation in a public park, it is important that his experience be a successful one.

It is intended by these recommendations to develop the recreation potential of people who must depend upon wheelchairs or walkers, braces, crutches, canes or artificial limbs, or whose coordination, strength and stamina are impaired through injury, disease, birth defects or aging. It is not within the scope of this handbook, however, to make recommendations that would enable all disabled park visitors to use all park facilities.

The proposals made here will offer people with physical limitations the same opportunities to use public park facilities as others. Since the disabled population is only a small minority of park users it is not recommended or implied that elaborate, extensive new construction or alterations be made for their use; however, careful consideration should be given to the problem and the designer or administrator should be guided by local needs for these specialized facilities and select the appropriate type and number required accordingly.

The recommendations made in this handbook are not exhaustive and it is hoped that they will induce park designers and administrators, through thoughtful design and management, to provide facilities which will greatly increase the recreational potential of any public park for use by the physically handicapped person and make his visit a safe, less strenuous and a more pleasurable experience.

INFORMATION

It is of the utmost importance that the visitor with physical limitations be made aware of the special facilities provided for his use at the point where he enters the park.

Eye-catching signs located at the park entrances plus literature distributed at the entrance control station informing the disabled person of the location and scope of these facilities are needed.

The use of a uniform system of signs bearing a special symbol designating the direction to or location of areas designed for use by the handicapped should be adopted by all parks.

TYPICAL SIGNS USING SYMBOL

ACCESS

Access to all park facilities adapted for use by the physically handicapped is a major consideration in park planning and should be designed to give the handicapped person a maximum of mobility with a minimum of assistance and effort. Unobstructed movement from parking areas to recreation areas and easy entry into comfort stations and other structures is the essential element in providing recreation for physically handicapped persons in public parks.

PARKING

Parking areas should be located as closely as possible to areas or facilities likely to be visited by handicapped persons. All parking lots of any size should have specially designed and designated stalls for wheelchair users. These stalls should be constructed so that a wheelchair may be maneuvered next to a car for easy exit or entrance by the handicapped person. One stall plus .5% of the total parking spaces should be ample.

The parking lot surface should be paved with a smooth, nonslip surface in the area of these stalls. Drop curbs or ramps should be provided for easy access to trails or walks. An opening of 30" should be maintained between guard rails or car stops to allow a wheelchair to pass.

LOADING POINTS

Shaded or covered benches should be located at or near the parking lot, providing a resting and pickup place for handicapped and elderly.

Within a park special loading points should be provided to give handicapped visitors convenient access directly to recreation facilities. Where possible these should be turnouts to avoid blocking traffic and they should be designated especially for use by the handicapped visitor only.

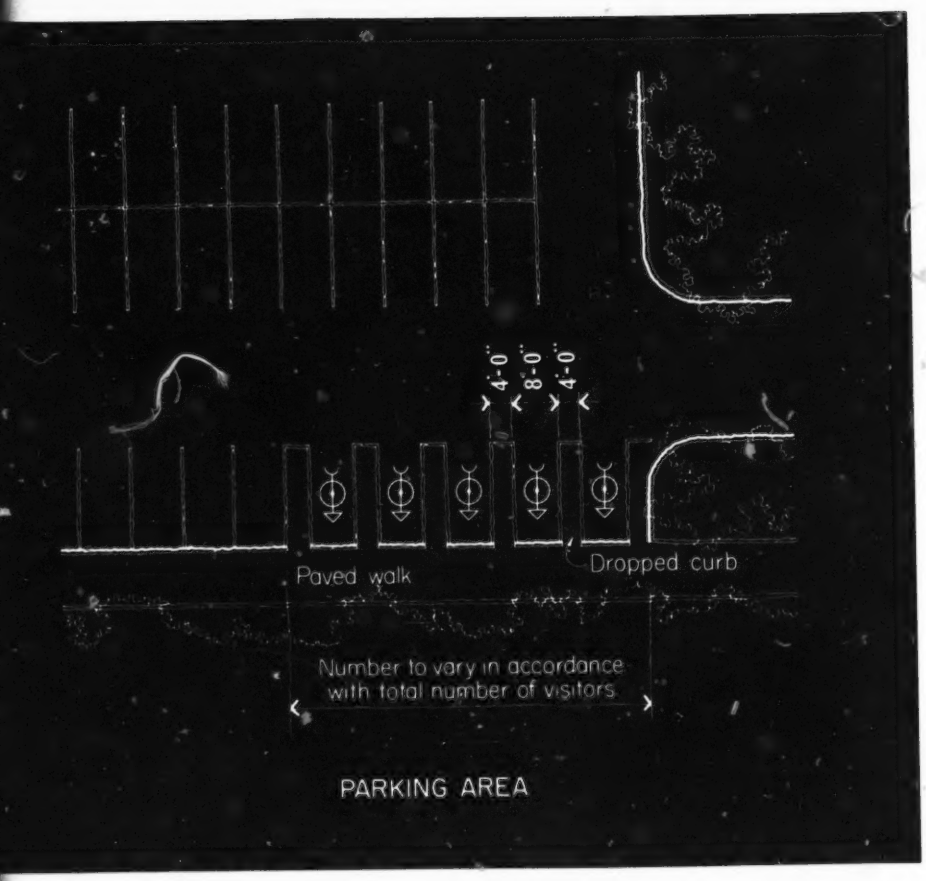
WALKS AND TRAILS

Walks and trails designed for use by disabled persons should have a minimum width of 48" and be paved with a smooth hard, nonslip surface of concrete, sealed asphalt or like material. Care should be taken to minimize expansion joints and expansion joint filler which expands above the walk surface. The walk should be reasonably level in cross section as crowned or banked surfaces make wheelchair handling difficult.

Walks which cross other walks, drives or parking areas should blend to the same level, eliminating steps or sharp breaks in grade. Changes in elevation should be made by the use of ramps.

Level spots for stopping, turning and recessed resting areas should be located at convenient intervals. Park benches with backs and arm rests spaced 24" apart along the bench should be provided for assisting a weak or elderly person to raise or lower himself with a minimum of effort. A parking spot for a wheelchair should be provided at one end of such a special bench. Surfacing of the area around the bench should match that of the adjacent walk.

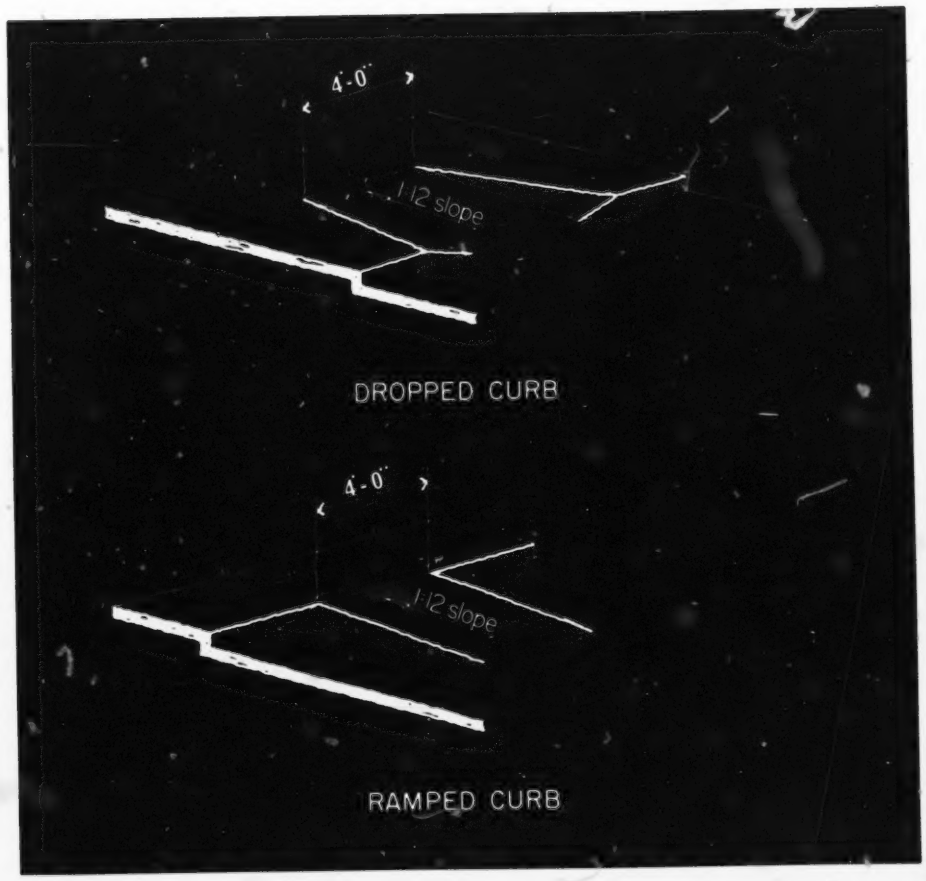
A contrasting surfacing material at the edge of walks, or in the case of an asphalt-surfaced trail a painted line, would help those with limited vision to keep on the path. Guard rails or curbs should be placed at danger areas.



PARKING AREA

PARKING STALLS SHOULD BE SPECIALLY DESIGNATED FOR WHEELCHAIR USERS ONLY

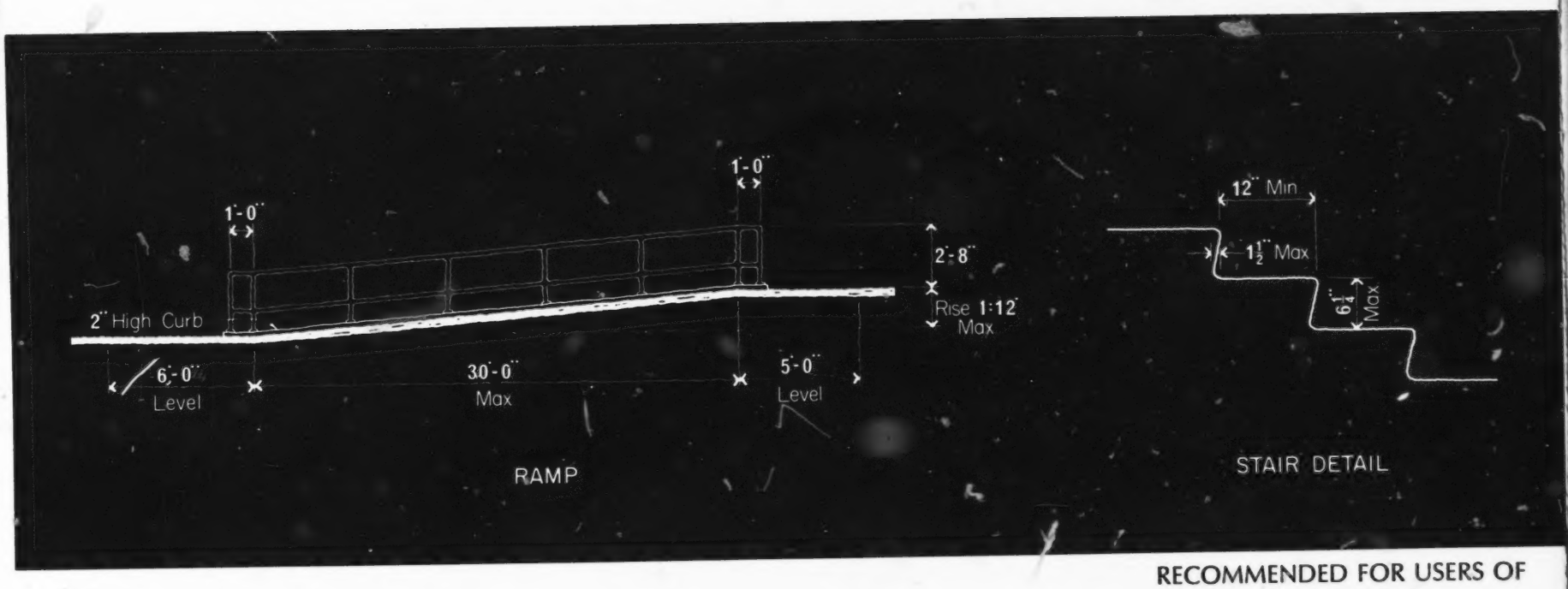
WHEELCHAIR CIRCULATION BEHIND CARS SHOULD BE AVOIDED.



DROPPED CURB

RAMPED CURB

PATH AND RESTING AREA

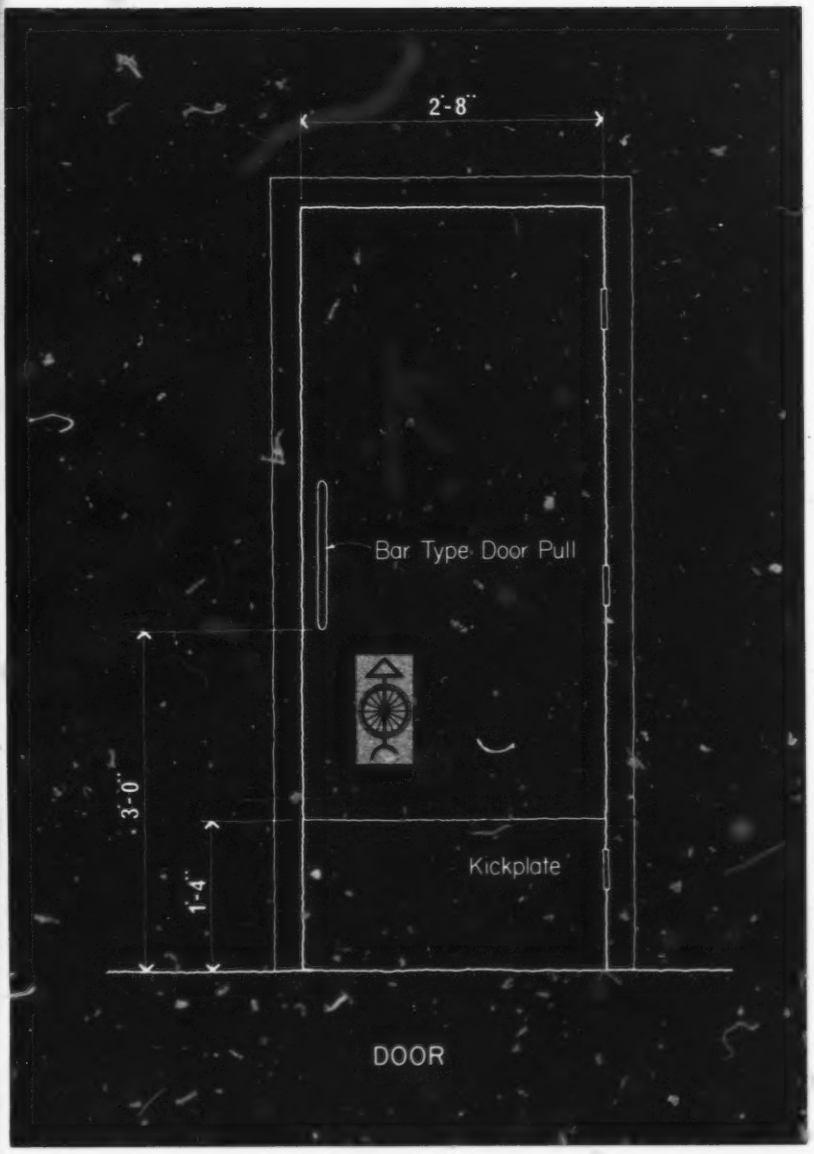


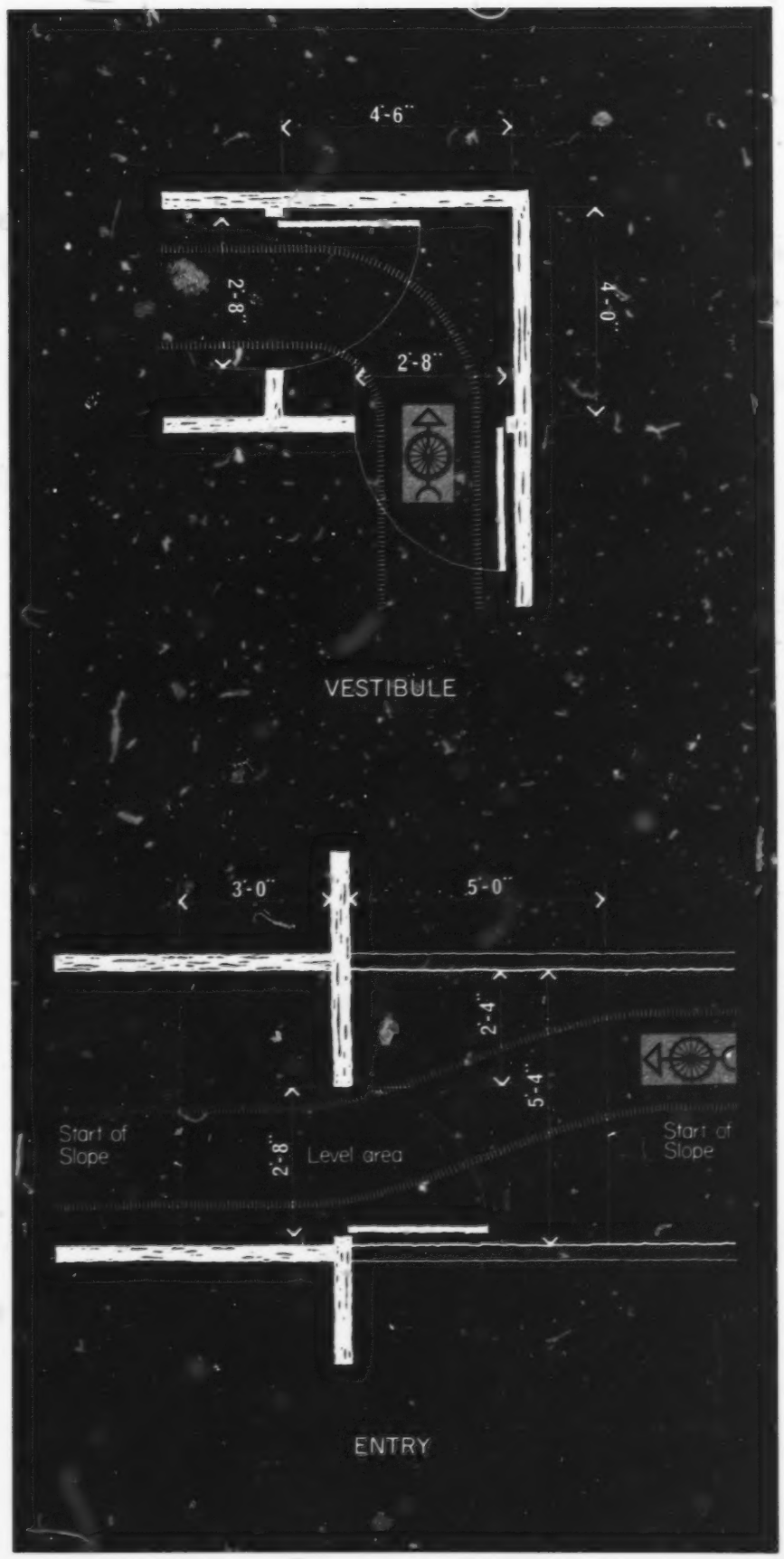
RECOMMENDED FOR USERS OF CRUTCHES OR BRACES

RAMPS

Ramps should be used on trails and walks where required by the topographical situation, or to provide access to above-grade structures or facilities for wheelchair users or people with impaired strength and coordination. Ramps should be constructed with a 37″ minimum between railings or 72″ between railings for two-way circulation. The maximum gradient should be 8.33% or 1:12 (a preferred grade is 5%) with a smooth transition to upper and lower levels. Level platforms on ramps should be provided at top and bottom levels, no less than 30′-0″ apart on long ramps and at all changes in direction. Handrails, preferably on both sides, should be 32″ high, offset 2″ from a wall and extending at least 1′-0″ beyond the top and bottom of the ramp. Curbs 2″ high and 4″ wide of wood or concrete should be under the handrails at ramp level to prevent wheelchairs from rubbing walls or catching on railing posts.

If the maximum allowable gradient cannot be maintained, it is still preferable to use a ramp, as a steep ramp is easier to negotiate than steps and a second party may be called for assistance. If even a steep ramp is not feasible then a stair of the type shown may be used.





DOORS

Doors should have a minimum clear opening of 32" and the threshold should be flush with the floor. Vertical bar type pull handles should be used that allow the door to be opened by a single effort. A delay-type self-closer is recommended.

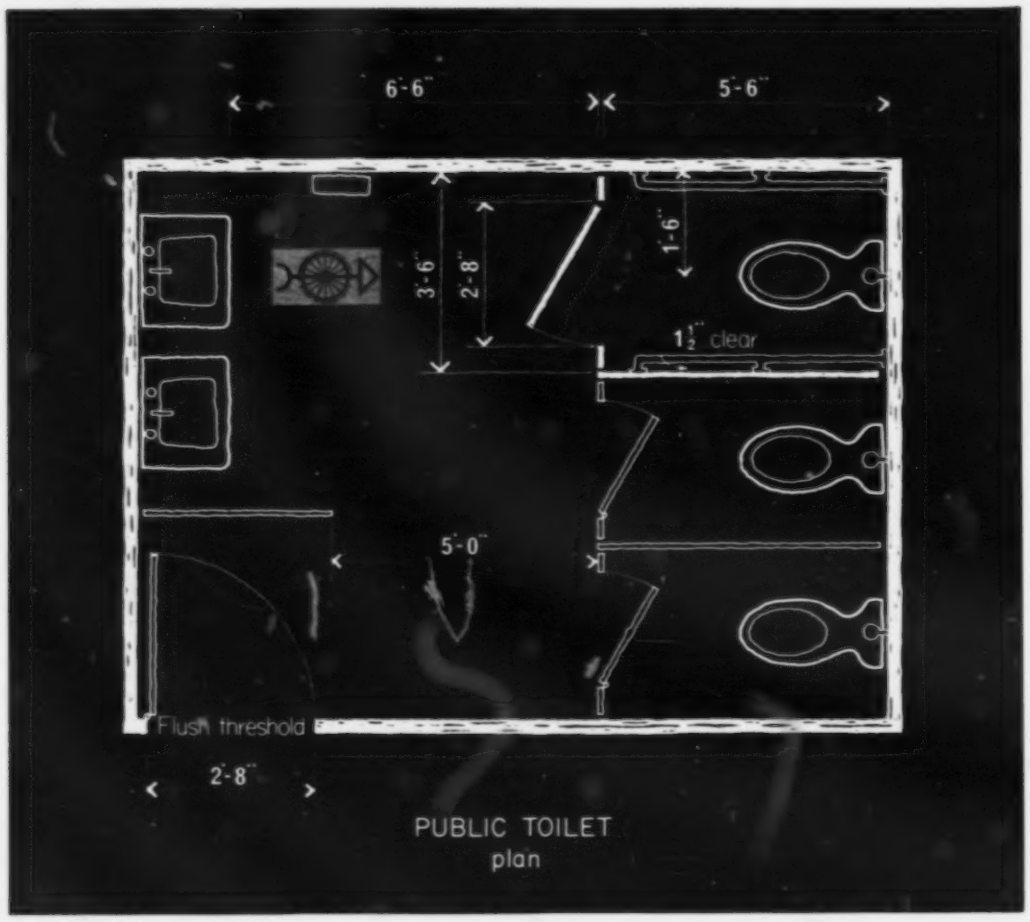
CONCESSION STANDS OR RESTAURANTS

Food service areas should provide one or more counter locations and serving tables where wheelchair users may be served.

Special building access and adequate room for circulation of wheelchairs should be provided. Tables constructed with recessed supports allowing the wheelchair arm to slide under should be installed.

TELEPHONES

Public telephone installations of the post-mounted type, avoiding the use of booths, would allow the majority of handicapped persons, including wheelchair users, to have sufficient access to the dial and receiver to use the phone unaided.



PUBLIC TOILET
plan

TOILET FACILITIES

Proper access to toilet facilities for the disabled park visitor is of basic importance. If the comfort station is above grade the wheelchair user will require a ramp with enough level area on both sides of the door so that he may open the door without aid.

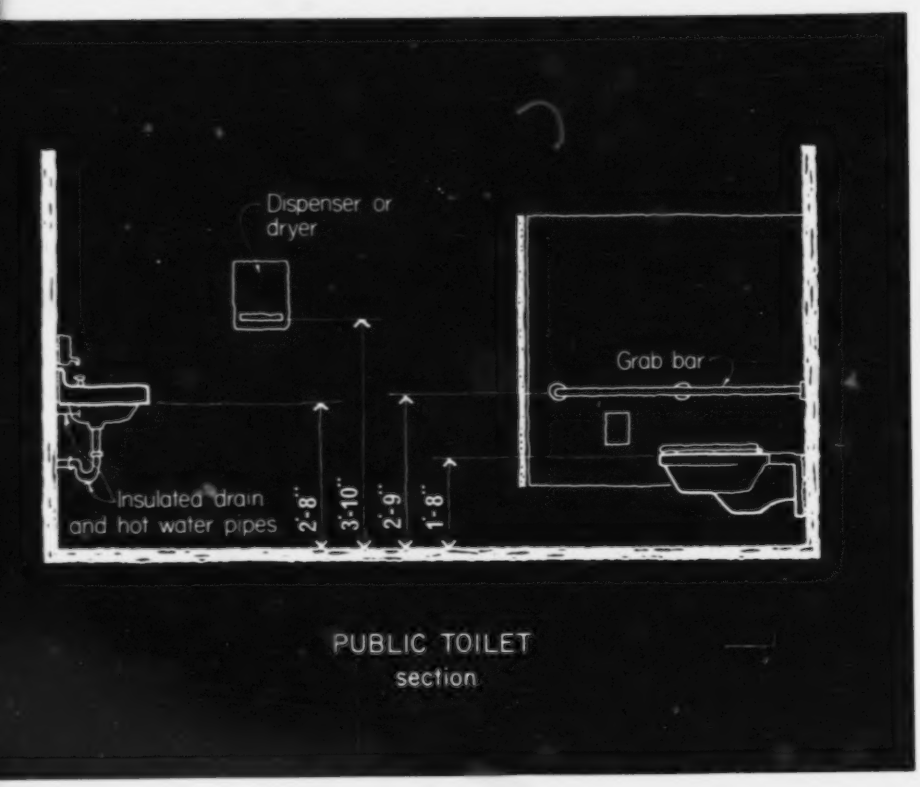
Urinals should be floor-mounted or, if wall-mounted the basin should be no higher than 19" above the floor, and equipped with a horizontal handrail. The flushing device must be within easy reach of the wheelchair user.

Lavatories should be wall-hung with narrow aprons and plumbing should be placed as high as possible under the lavatory to avoid striking legs and chair. Hot water pipes must be well insulated and faucet controls of the lever type are recommended.

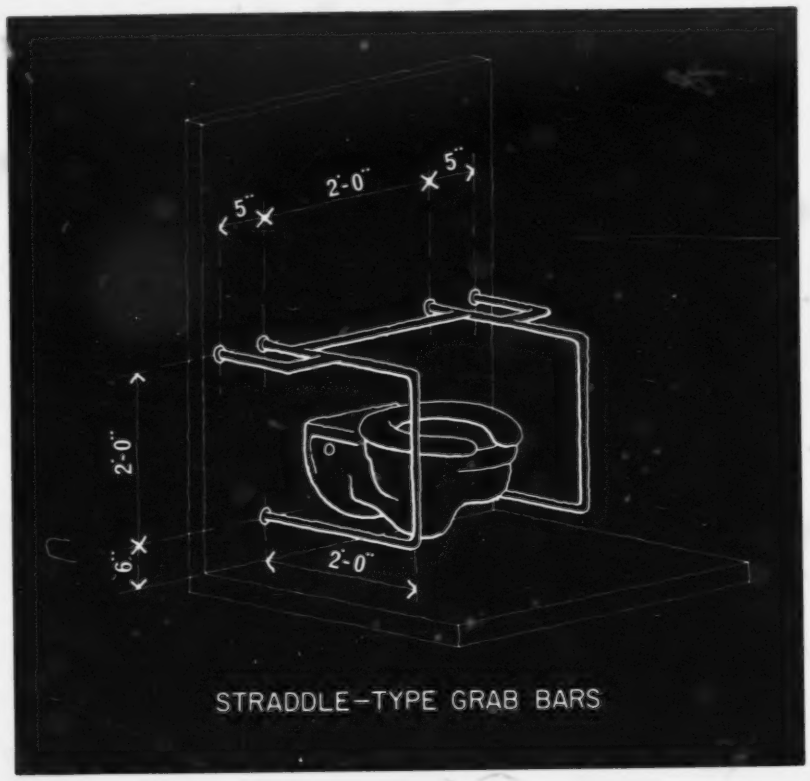
The hand dryer, soap dispenser and mirror should be placed lower than usual. Circulation within comfort stations should be carefully checked for adequate wheelchair clearance and turning radius.

DRINKING FOUNTAINS

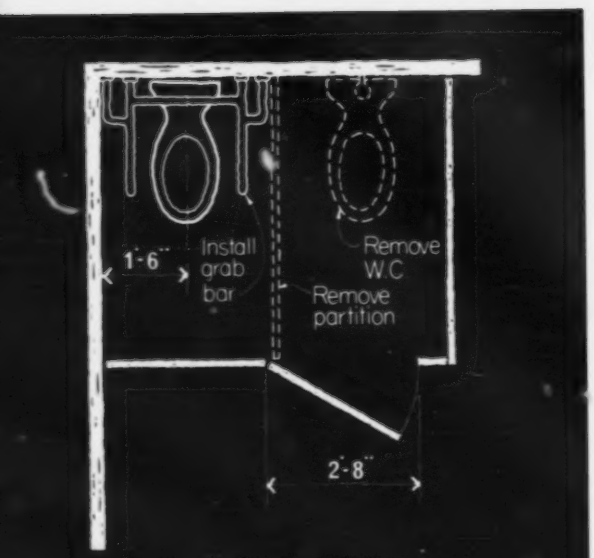
Drinking fountains should be placed at a convenient height and should project from wall. Stepping blocks, often provided for the convenience of children, should be omitted or located so as not to interfere with a wheelchair user.



PUBLIC TOILET
section

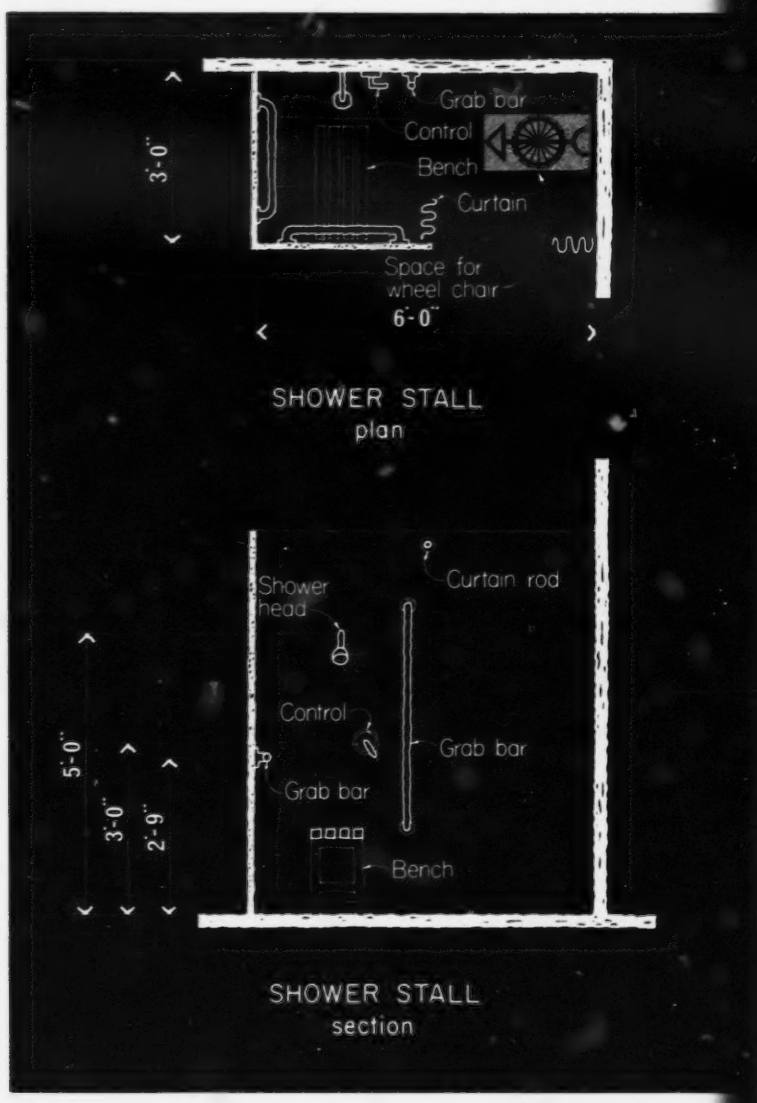


STRADDLE-TYPE GRAB BARS



ENLARGING EXISTING
W.C. STALL

DRINKING FOUNTAINS



RECREATION AREAS

SWIMMING POOLS

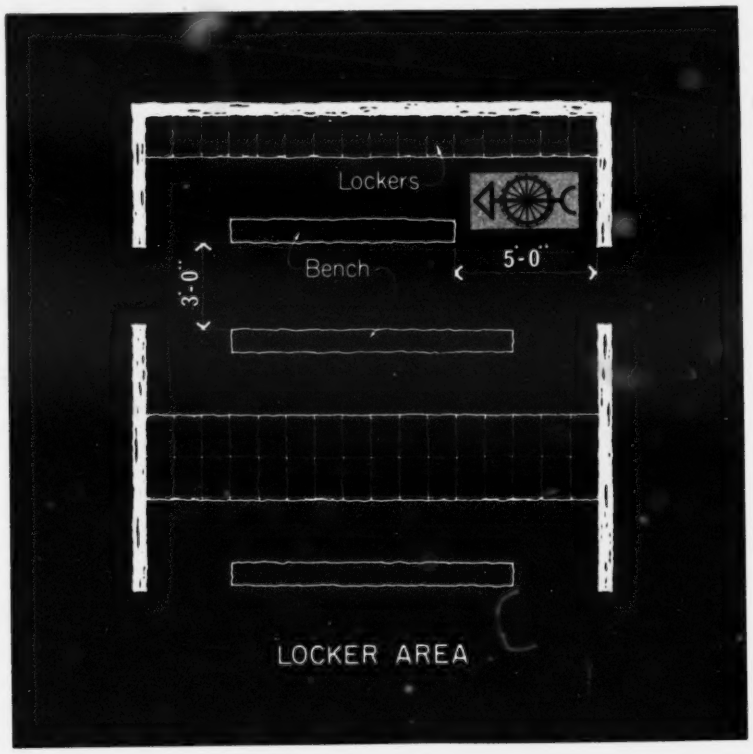
Any existing pool may be easily adapted for use by the handicapped by simply adding a recessed area with broad steps at one corner or side on the shallow end where weak or elderly persons may sit in the water. Sloping handrails provide safe entry into the pool by the physically handicapped and elderly.

A safe and convenient place for parking wheelchairs and storing braces, crutches and prosthetic appliances should be provided near these steps.

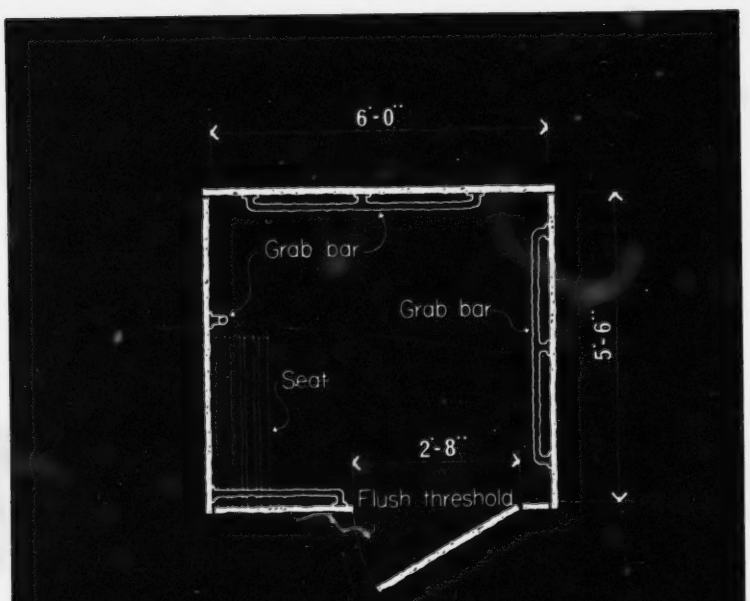
At lakes or beaches a paved walk leading to and along the waters would give access for the physically handicapped. Entry into the water may be accomplished by a series of lifelines of nylon rope mounted on posts and extending from the paved walk into the lake to a limited depth. These lines should be spaced at 20-foot intervals normal to the shore with water depths marked on each post.

Bathhouse entry should be designed with particular attention paid to wheelchair circulation and clearance. In locker areas benches should be eliminated in front of lockers designated for wheelchair users. Dressing stalls for wheelchair users should be enlarged, equipped with a bench, grab rails, and a door that swings outward. The washroom floor should be level with no curbs and pitched only about ¼" in 10'-0" toward the floor drains in the shower stalls only. Curtains are preferable to doors. Hot water faucets should be conspicuously marked to prevent accidental scalding.

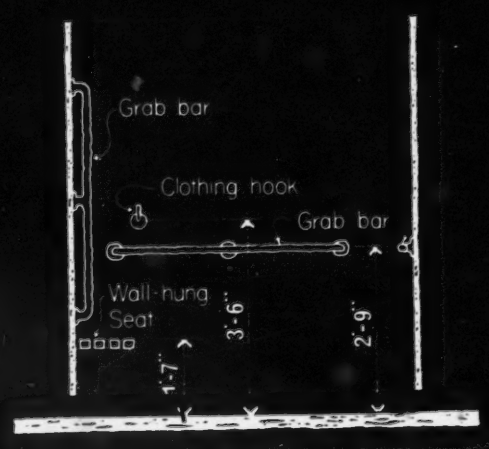
SPECIAL LOCKERS SHOULD BE DESIGNATED FOR WHEELCHAIR USERS ONLY, AND BENCHES OMITTED IN FRONT OF THEM



LOCKER AREA



DRESSING ROOM
plan



DRESSING ROOM
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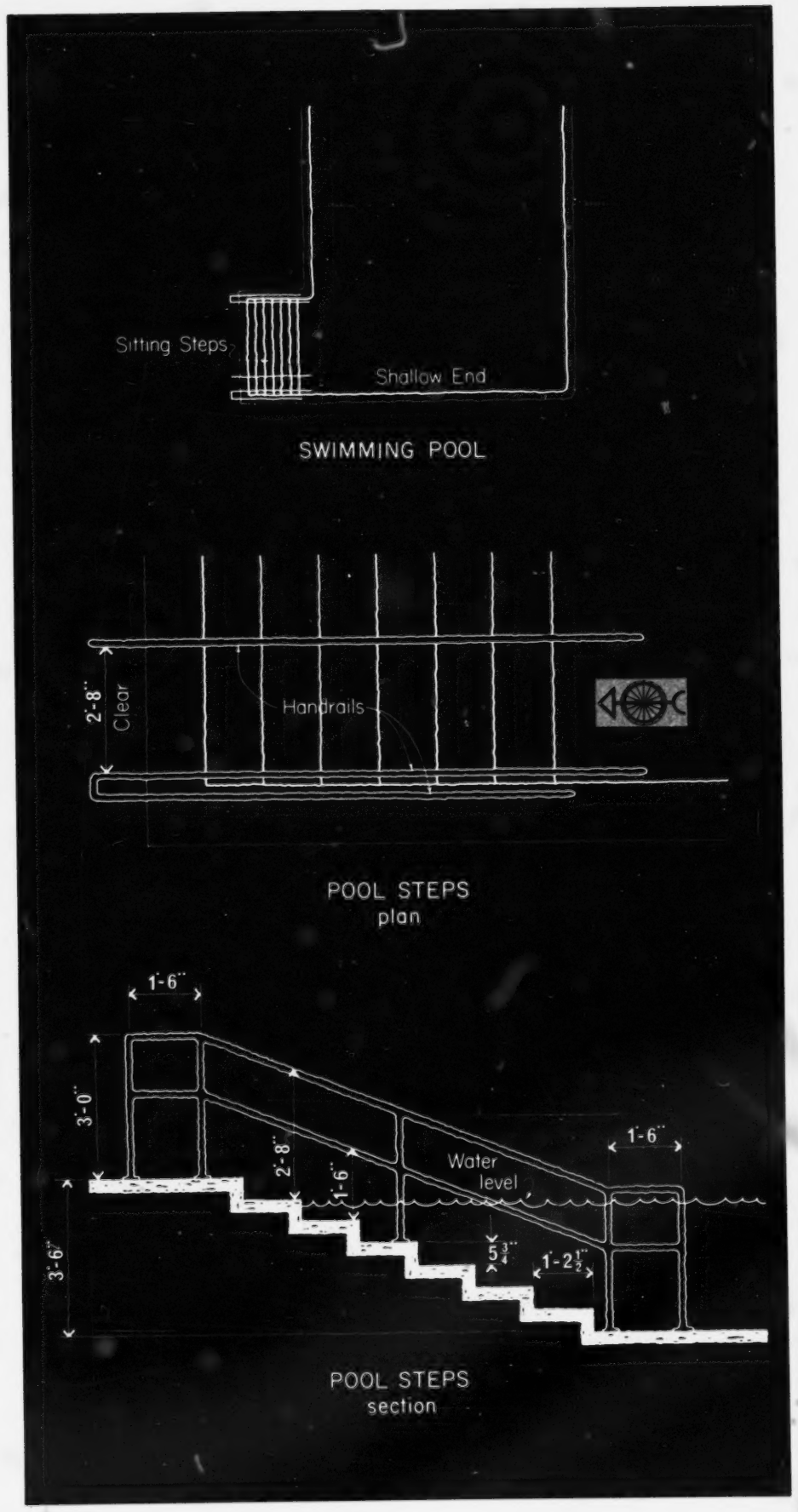


SWIMMING POOL

POOL STEPS
plan

POOL STEPS
section

SPECTATOR AREAS

The provision of special areas for the handicapped to watch active sports allows at least a minimal type of participation to almost any handicapped person.

Spectator areas should be located as closely as possible to the sport area and protection from sun, rain and misdirected balls or other playing objects is necessary. A small shelter with good access, a firm floor, with the type of benches recommended, plus parking areas for wheelchairs is all that is required.

CAMPING

Camping for the disabled requires but little change in the plans of the standard tenting campsite. Campsites for the disabled should be arranged in a cluster including a comfort station and washhouse 300 feet or less from the individual campsite. Trails and walks in the immediate area should be in accordance with standards previously noted. Access to the camper's store and recreation hall should also be provided.

These campsites should be reserved for use by disabled persons and their families and application for reservations should be made in advance through the Park Administrator.

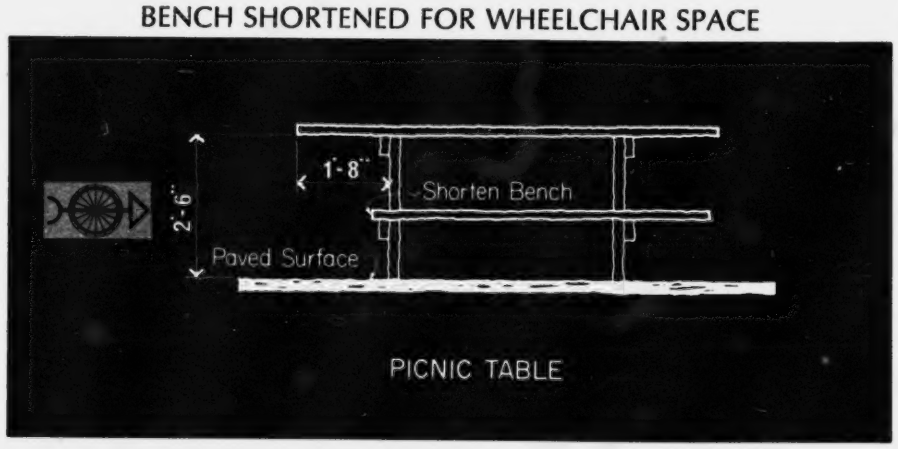
PICNICKING

Good access to the picnic site, a comfort station less than 300 feet away, a nearby drinking fountain and a firm level surface around the table and raised fireplace is all that is required to accommodate wheelchair users and other disabled persons.

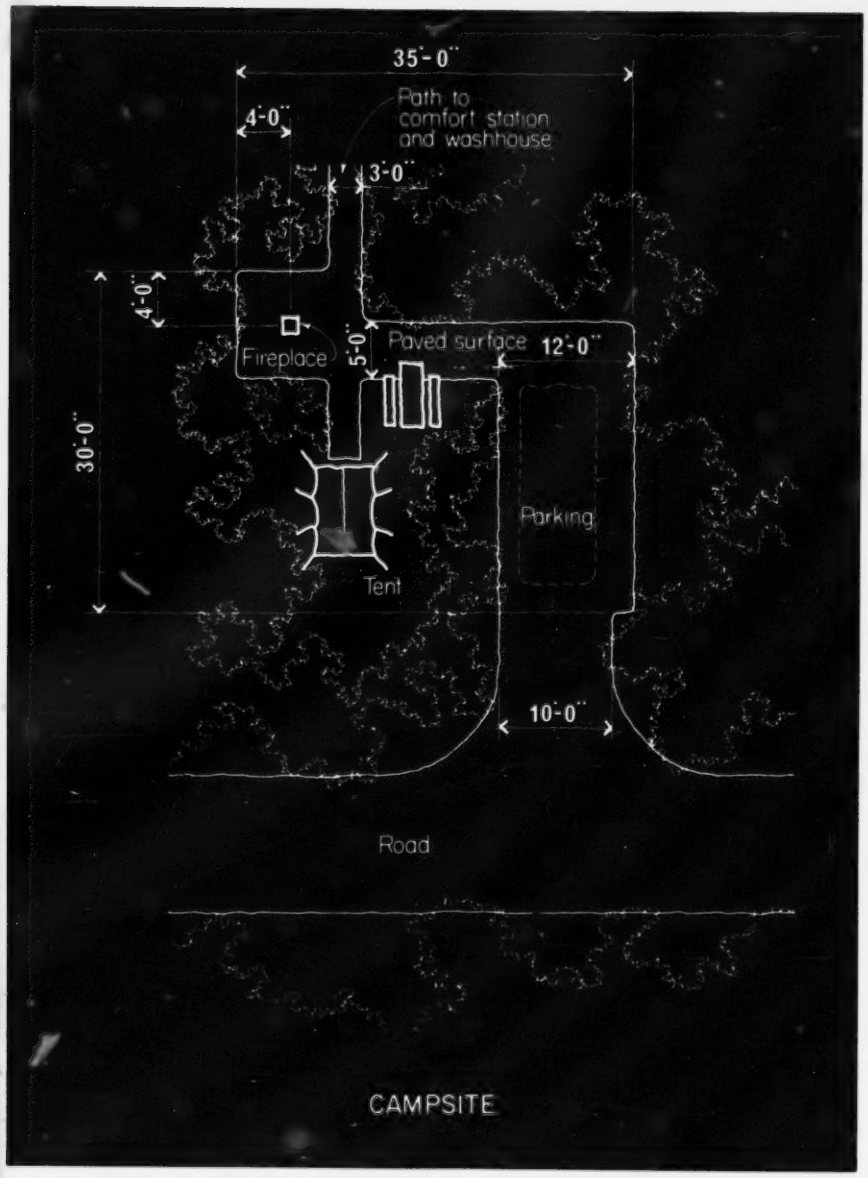
BOATING

Boat docks or piers specially designated for use by the handicapped should be provided with a guard rail for safety. Entry into a boat from a dock can be accomplished by the wheelchair user by a ramp or gangplank.

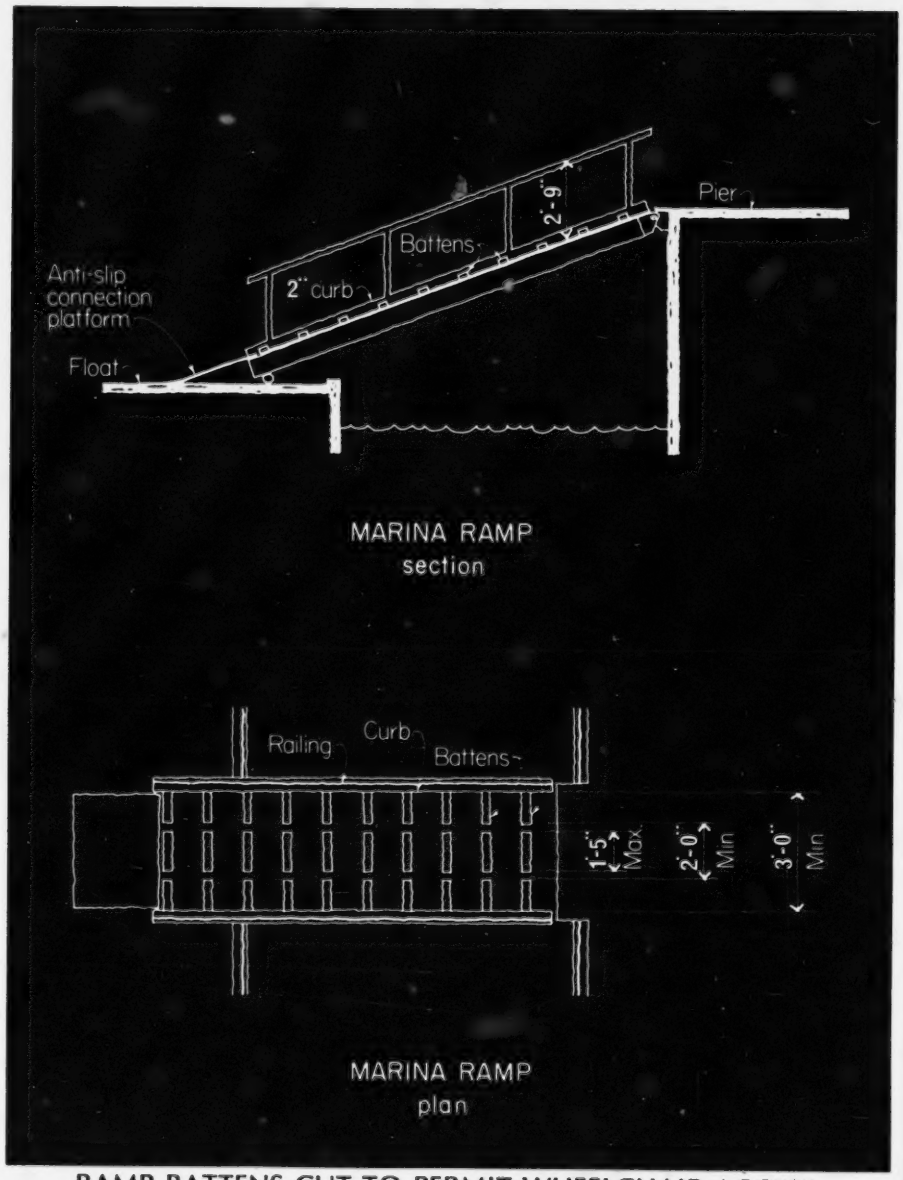
BENCH SHORTENED FOR WHEELCHAIR SPACE



PICNIC TABLE



CAMPSITE



MARINA RAMP
section

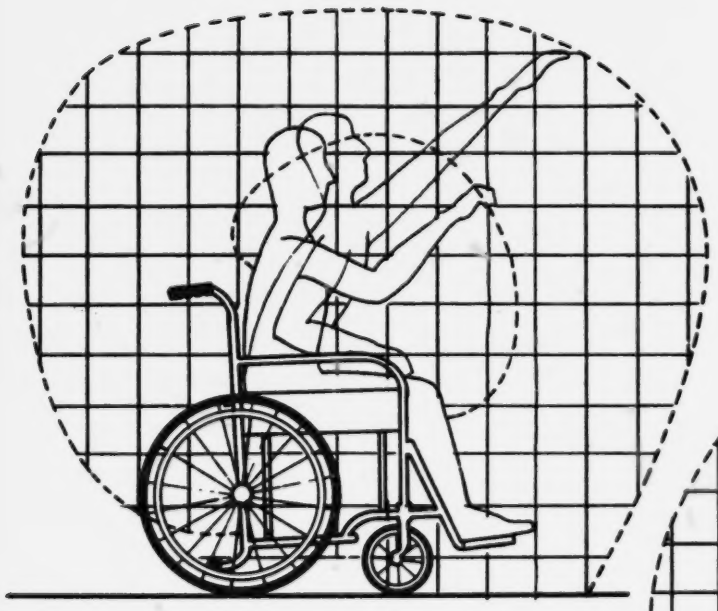
MARINA RAMP
plan

RAMP BATTENS CUT TO PERMIT WHEELCHAIR ACCESS

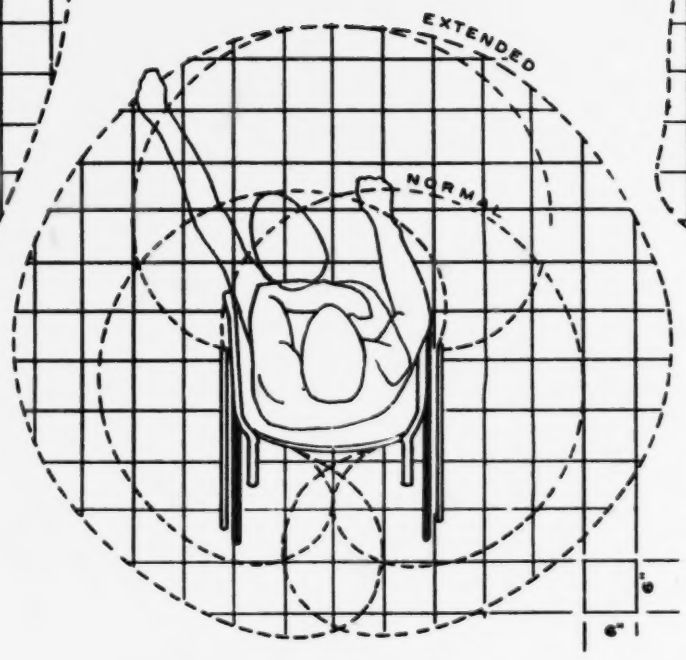
The wheelchair has been the determining factor in the design of special equipment for the handicapped.

NORMAL AND EXTENDED REACH FROM WHEEL CHAIR

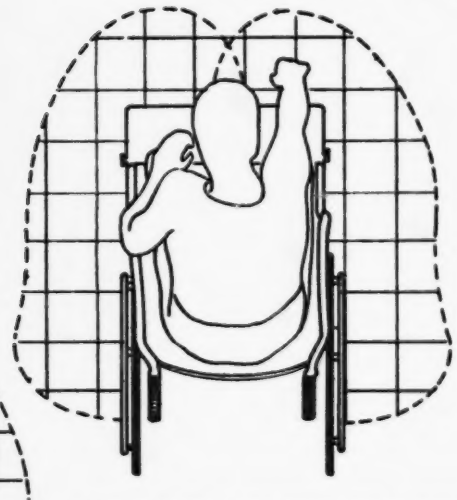
(Average Normal Male)



VERTICAL PLANE



HORIZONTAL PLANE 30° FROM FLOOR



HORIZONTAL PLANE AT FLOOR

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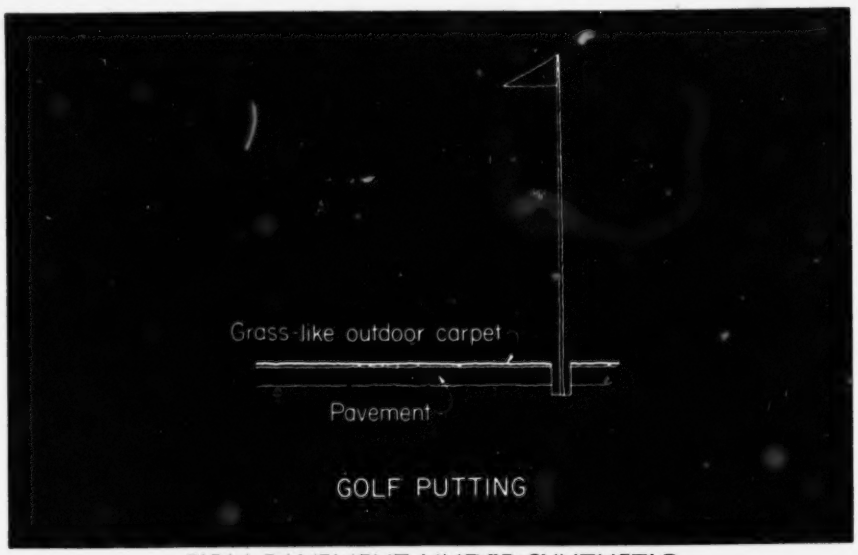
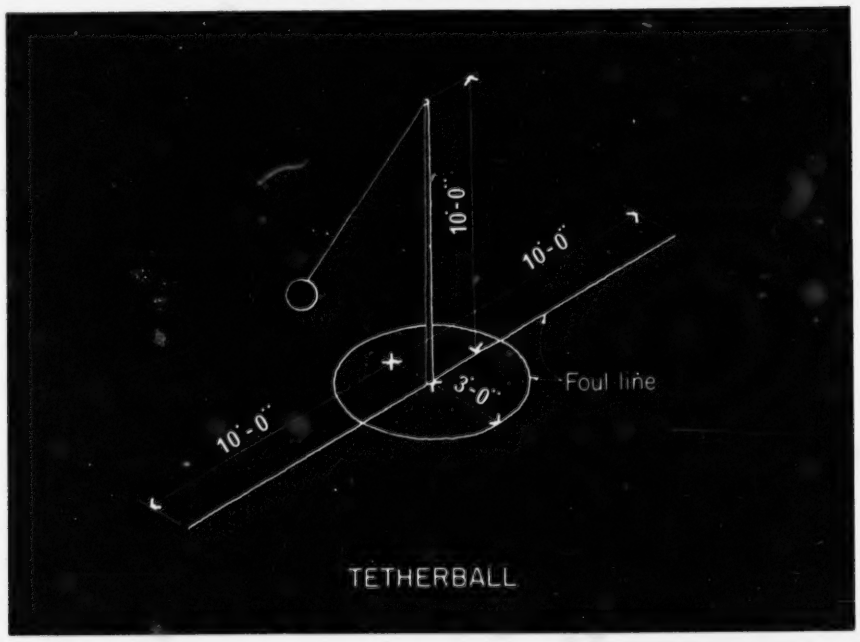
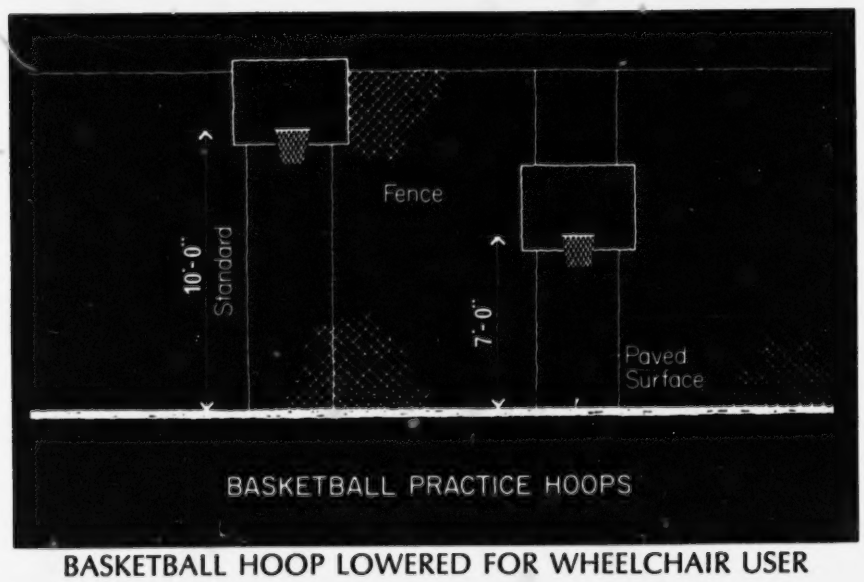
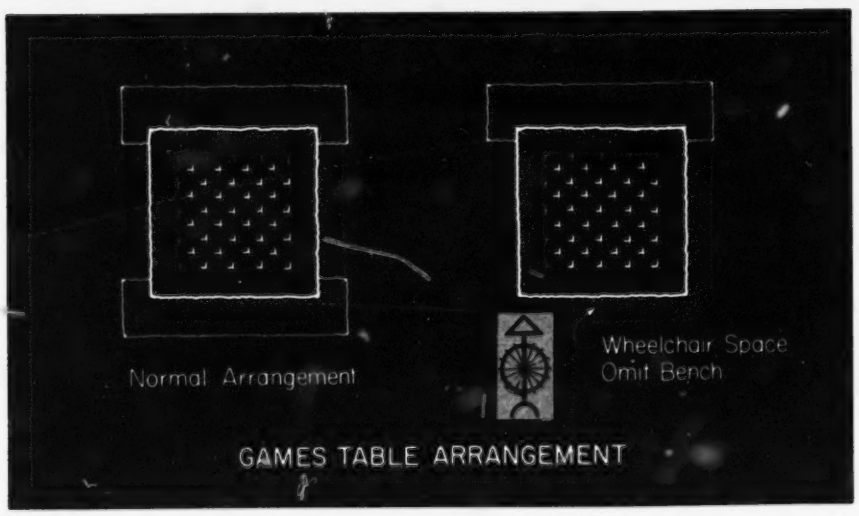


FIRM PAVEMENT UNDER SYNTHETIC GRASS FOR WHEELCHAIR USER





BASKETBALL HOOP LOWERED FOR WHEELCHAIR USER



GAME AREAS

Individuals in wheelchairs may take part in activities such as volleyball, basketball, shuffleboard, boccie, croquet, tetherball, golf putting on special greens, table tennis, horseshoe pitching, kite flying, badminton, baseball pitching, target and skeet shooting and archery. Certain disabled persons with more mobility may, in addition, ride bicycles or horses, use most playground equipment and practice handball or tennis on a backboard. Few of these activities require adaptation of existing facilities. Suggested changes in some equipment and layout to make them more useful to the disabled are shown.

Table games such as checkers or chess are popular with the elderly and require only tables set in a shaded or protected location.

WINTER SPORTS

The ability to participate in winter sports depends directly upon the degree of physical impairment. Persons in good physical condition, disabled by the loss of one arm or leg, may engage in any of the more strenuous sports. Many elderly individuals or persons on crutches or confined to wheelchairs may enjoy sledding, sleighriding, tobogganing or snowmobiling on a limited scale. No special adaptation of facilities are recommended for the handicapped who may wish to take part in winter sports.

FISHING

Fishing is a very desirable activity for disabled persons as it requires little exertion, allowing almost any disabled person to participate.

Access to good fishing water is of prime importance and may be accomplished by providing nearby parking and paved walks leading to fishing piers. Fishing in small streams may require only a paved turnout with a protective handrail along the stream bank.

HIKING

All trails cannot be constructed for wheelchair users along their entire length; however, spur or looped trails leading to scenic or historic sights should be considered. Trail construction should follow recommendations for walks and paths.

EDUCATIONAL AND CULTURAL INSTITUTIONS

Auditoriums, interpretative centers and museums should be designed with the disabled visitor in mind. Parking, building access, wheelchair circulation and toilet facilities should follow recommendations cited earlier in this handbook.

In the case of auditoriums with fixed seating an occasional seat on the aisle should be eliminated to create a space for use by a wheelchair.

PUBLIC RELATIONS

It is important that whenever a new park is constructed, or an old one altered with special provisions made for the disabled, that this information be widely disseminated so that disabled persons may seek out these parks and make use of these special conveniences.

Veterans organizations, volunteer civic groups interested in the physically handicapped, schools and various other institutions working with the handicapped will welcome this information and can help to guide disabled persons to parks with special facilities for their particular use.

The following individuals and organizations provided significant information and cooperation in the preparation of this handbook:

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Dr. Edith Ball, School of Education, New York University
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National Health Education Committee, New York City
National Recreation and Park Association, Washington, D.C.
New York State Department of Health
New York Telephone Company
Paralyzed Veterans of America, Committee on Architectural Barriers, New York City
U.S. Department of Health, Education and Welfare, Vocational Rehabilitation Administration
U.S. Department of the Interior, Bureau of Outdoor Recreation
U.S. Public Health Service, National Health Survey

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Dear Friend:

Thank you for your recent inquiry.

☑ The enclosed information is supplied with our compliments.

☐ We regret we are unable to furnish the material requested. Our supply is exhausted.

☐ Your request is for information the Bureau of Outdoor Recreation does not have available to send you. Even so, we are enclosing material we hope will be useful.

We are pleased to learn of your interest in our activities.

DEPARTMENT OF THE INTERIOR
Bureau of Outdoor Recreation
Washington, D.C. 20240

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